

In the Specification

Please replace the paragraph at page 28, line 29 through page 29, line 3 with the following paragraph:

D¹
Substances identified in this method are substances that specifically alter the apoptotic mechanism in melanocytes and keratinocytes. For example, substances that mimic nerve growth factor can be tested in an assay such as the one described above to evaluate their activity in inhibiting apoptosis. Additionally, substances identified and evaluated by this method can be peptides, organic molecules, small organic molecules, antibodies or antibody fragments.

Amendments to the specification are indicated in the attached "Marked Up Version of Amendments" (page i).

In the Claims

Please cancel Claims 1-32 and 37-44.

Please amend Claims 33-36 and 45-52.

D²
33. (Amended) A method of maintaining hair growth in a vertebrate comprising contacting the keratinocytes of the vertebrate with a ligand or pseudo-ligand that binds to keratinocyte p75 nerve growth factor receptors, thereby inhibiting apoptosis, and maintaining hair growth.

D³
34. (Twice Amended) The method of Claim 33 wherein the ligand is a biologically active fragment of nerve growth factor.

D⁴
35. (Amended) The method of Claim 33 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.

D4 36. (Amended) The method according to Claim 35 wherein the peptide is selected from the group consisting of SEQ ID NO: 4, 9 and 10.

D5 45. (Amended) A method of treating alopecia areata in a human, said method comprising contacting keratinocytes in the skin of the human with a ligand or pseudo-ligand of p75 nerve growth factor receptor, in an amount sufficient to inhibit apoptosis, thereby maintaining hair growth.

D6 46. (Twice Amended) The method of Claim 45 wherein the ligand is a biologically active fragment of nerve growth factor.

47. (Amended) The method of Claim 45 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.

D7 48. (Amended) The method according to Claim 47 wherein the peptide is selected from the group consisting of SEQ ID NO: 4, 9 and 10.

D8 49. (Twice Amended) A method of treating a human with male pattern baldness, comprising contacting the keratinocytes in the human with a pseudo-ligand or ligand of p75 nerve growth factor receptor, in an amount sufficient to inhibit apoptosis, thereby inhibiting apoptosis, and maintaining hair growth.

50. (Twice Amended) The method of Claim 49 wherein the ligand is a biologically active fragment of nerve growth factor that binds to the p75 nerve growth factor receptor.

51. (Amended) The method of Claim 49 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.

D9 52. (Amended) The method according to Claim 51 wherein the peptide is selected from the group consisting of SEQ ID NO: 4, 9 and 10.

Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages i - iii).

Please add new Claims 53-55.

53. (New) The method of Claim 33 wherein the pseudo-ligand is an antibody.
54. (New) The method of Claim 45 wherein the pseudo-ligand is an antibody.
55. (New) The method of Claim 49 wherein the pseudo-ligand is an antibody.

REMARKS

Claims 33-36 and 45-52, the claims of Group VIII in the Restriction Requirement of June 5, 2001, have been elected for continued prosecution. The accompanying Request Transmittal for a continued prosecution application notes that the requested continued prosecution application (CPA) is a divisional application under 37 C.F.R. 1.53(d) of application number 09/018,194.

Claims 33-36 and 45-52 are now amended with this Preliminary Amendment for clarity of meaning. Claims 53-55 have been added. See page 21, line 1 to page 22, line 5 for support for Claims 53-55. Claims 1-32 and 37-44 have been canceled.

Remarks Regarding Rejection of Claims 6-10 Under 35 U.S.C. § 112, First Paragraph

In the Office Action of 2 December 2002, the Examiner maintained the rejection under 35 U.S.C. § 112, first paragraph of Claims 6-10. Applicants are now pursuing the prosecution of Claims 33-36 and 45-55 with this Preliminary Amendment accompanying a request for a divisional application under 37 C.F.R. 1.53(d) (continued prosecution application). Applicants now address the comments of the Examiner as those comments may apply to claims drawn to methods of maintaining hair growth.